King Tao Jason **Ng**

Profile Summary

I am an experienced data scientist with expertise in data science, machine learning, natural language processing, and software engineering, with a strong focus on ensuring compliance with financial market regulations.

Contact details

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Personal information

Citizenship: **Australian**
Languages: **English**, **Chinese**

Skills

- Leadership, People Management
- Project Management, Business Analysis, Vendor Management
- Data Governance
- Machine Learning, Statistics, Natural Language Processing
- Software Engineering, Software Quality Assurance
- Databricks, Elastic Stack, Microsoft Power BI
- Python, R, C, C++, KDB+/Q

Experience

Senior Data Scientist   **Jul 2022 - Present**
Chief Data and Analytics Office, ASIC

◇ Led the implementation of the Licensing ML Proof of Concept, Knowledge Management Metadata Extraction, and Lessons Learned Lite Review

◇ Supervised and mentored data analysts, fostering professional growth and skill development

◇ Provided leadership in the ML framework, ensuring best practices in analytics and machine learning

Sessional Teaching Academic   **Feb 2022 - Jun 2022**
School of Computing, Macquarie University

◇ Tutored and led coursework for Document Processing and Semantic Technologies (COMP3220)

Senior Analytics Platform Owner   **Jul 2021 - Jul 2022**
Chief Data and Analytics Office, ASIC

◇ Led the promotion and management of Databricks, RStudio Servers, Python Servers, and the Data Science Lab, ensuring optimal performance

◇ Proposed the Databricks roadmap, outlining onboarding strategies, workflow setup, and best practices to enhance efficiency and collaboration among data analysts

Data Scientist   **Oct 2019 - Jul 2021**
Chief Data and Analytics Office, ASIC

◇ Led the development and implementation of NLP Prospectuses, leveraging NLP to extract insights and improve document analysis

Data Scientist   **Aug 2017 - Jun 2019**
School of Computer Science, University of Sydney

◇ Designed and developed a Researcher Collaboration Recommendation System using Python and D3.js, enabling data-driven connections and enhancing research networking through interactive visualizations

Analyst   **Jul 2016 - Oct 2019**
Market Infrastructure, ASIC

◇ Proposed and implemented a Wash Trade Detection system using KDB+/Q, enhancing market surveillance and regulatory compliance

◇ Designed and developed a Market Data Analytics Hub using the Elastic Stack, enabling real-time data analysis and improved decision-making

Analyst   **Jan 2013 - Jul 2016**
Market & Participant Supervision, ASIC

◇ Led the development and implementation of a Market Analysis and Intelligence Surveillance System, improving market cleanliness

◇ Drafted the comprehensive Technology and Analytics Capability Review, assessing current capabilities and identifying opportunities in data analytics

Intranet Programmer — Oct 2011 - Dec 2011
Information and Communications Technology, Scots College

◇ Oversaw the maintenance and management of IBM DB2, ensuring database reliability, performance, and security

Domain Analyst — Mar 2011 - May 2011
Wagering Technology, Tabcorp Holdings Limited

◇ Led and managed requirements gathering for the Customer Loyalty Project, ensuring alignment with business objectives and stakeholder needs

Software Engineer — Jul 2008 - Mar 2011
Studio Development, Aristocrat Technologies Australia

◇ Designed and developed gaming applications using C and C++, creating engaging user experiences

Graduate Software Engineer — Jul 2007 - Jul 2008
Platform Development, Aristocrat Technologies Australia

◇ Designed and developed networking protocols for casino management systems using C and C++, ensuring secure and efficient communication across the platform

Graduate Test Engineer — Jan 2007 - Jul 2007
Software Integrity Testing, Aristocrat Technologies Australia

◇ Developed comprehensive test plans and executed unit and integration tests, ensuring high-quality software delivery and system reliability

Education

Master of Research, *Macquarie University* — Jul 2021 - Oct 2023

◇ Thesis titled *Identifying Causal Directions from Text: Unsupervised Learning using Bayesian Framework*

Master of Data Science, *University of Sydney* — Mar 2016 - Jul 2019

◇ Thesis titled *Academic Capability Mapping*

Master of Economics, *University of Sydney* — Mar 2008 - Jul 2012

Master of Information Technology, *UNSW* — Jul 2005 - Dec 2007

Bachelor of Science, *UNSW* — Jul 2001 - Mar 2005

Publications

Exploring Causal Directions through Word Occurrences: Semi-supervised Bayesian Classification Framework, ***King Tao Jason Ng** and Diego Mollá. The 21st Annual Workshop of the Australasian Language Technology Association, Melbourne, VIC, Australia, November 29 - December 1, 2023*

Hierarchical Word Mover Distance for Collaboration Recommender System, *Chao Sun, **King Tao Jason Ng**, Philip Henville and Roman Marchant. The 16th Australasian Data Mining Conference, AusDM 2018, Bathurst, NSW, Australia, November 28 - 30, 2018, Revised Selected Papers*